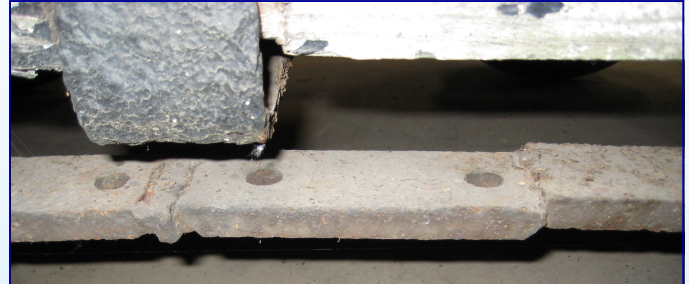


COAL CAR HISTORIC RECONSTRUCTION

Idiosyncrasies and Anomalies

March 10, 2008

Between the staff of Renton History Museum and the staff of the Northwest Railway Museum, we've done a fair amount of research on how coal mine cars were engineered. Historic photographs of coal cars revealed that the load end of our car was assembled incorrectly, with two steel straps installed upside down. The weight of the coal would have been pushed against this end as the car was dragged out of the mine; with these two straps improperly attached at the bottom, it is unlikely that the timbers could have withstood the pressure of a ton of coal trip after trip.



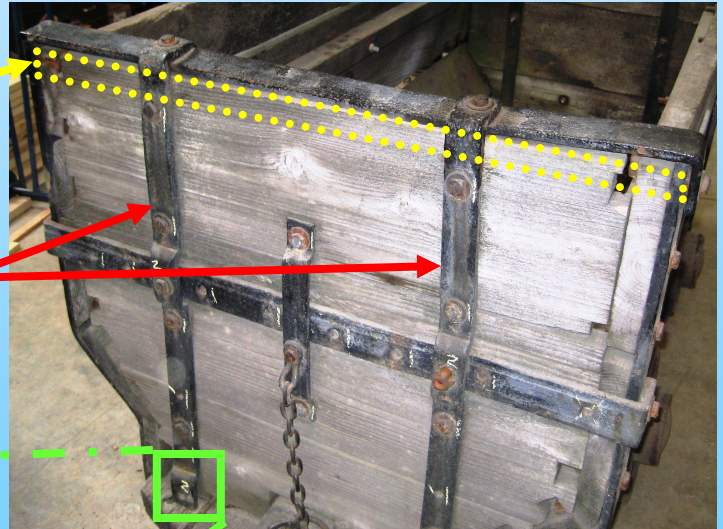
At some point in its history, the body of the coal car was lengthened. This photo shows the welded 6-inch piece that was added to the frame of the car.

We really had to put our heads together on this one to decide whether to fix this anomaly or leave it—were the straps accidentally reversed the last time the car was rebuilt by the Museum, or was this an earlier mistake, made at the mine? Ultimately we decided that since the car would have broken down pretty quickly if this had been an early mistake, the straps should be put back on correctly this time.

Northwest Railway Museum Director Richard Anderson pointed out how different coal car construction is from railroad car construction. “The railroads were the first example of government regulation in the U.S.,” Richard reminded us, so that railroad car construction was standardized to meet federal safety regulations. When it came to coal mine cars, it was up to mine operators, blacksmiths, and carpenters to keep them in good working order, however they had to do it.

The strap that is currently on top of the end of the coal car would have been on the front of the car, as shown by the yellow dotted lines.

The two vertical straps on the end of the coal car are currently on upside down. During the reconstruction, they will be flipped 180° and re-attached.



This photo shows the bottom of one of the vertical straps that is on upside down. The bend in the metal was one clue that something was not quite right with the way the straps were attached.